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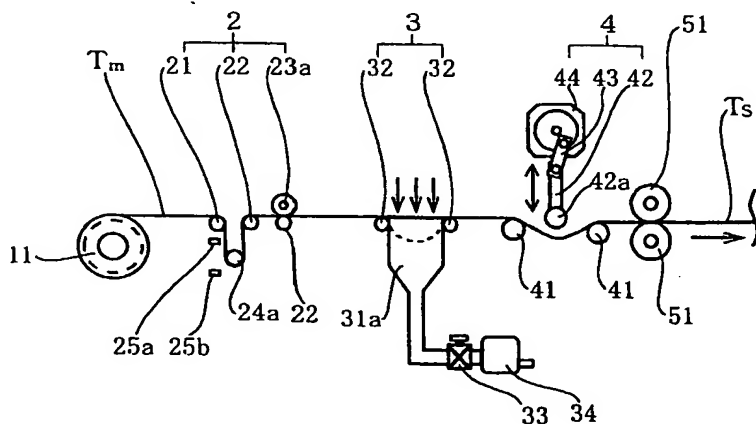
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(54) Title: METHOD OF PRODUCING A SPREAD MULTI-FILAMENT BUNDLE AND AN APPARATUS USED IN THE
SAME



(57) Abstract: A method of producing
a spread multi-filament bundle and
an apparatus used in the same are
provided, in which an arbitrary number of
multi-filament bundles of higher strength
are simultaneously spread with high
speed and facility and a high-quality
spread multi-filament bundle or sheet
with the component monofilaments
thereof aligned in parallel widthwise
and uniformly distributed in density is
produced with high efficiency. Such
mechanism is adopted herein as the
respective multi-filament bundles fed
from a yarn supplier or a creel being
subjected to the fluctuation of the tensile
force applied thereto alternatively between
tension and relaxation and the respective
bundles as subjected to such fluctuation

being passed in succession through a fluid flowing spreader comprising a plurality of fluid flowing portions disposed in succession
along the moving course of the respective bundles to be subjected to fluidal resistance so as to bend towards the direction to which
a fluid flows and the fluid flowing through any adjacent component monofilaments of the respective bundles whose bonding is
slackened due to such fluidal resistance so as to widely spread the respective bundles by the mutual action of such change of the
tensile force and such fluidal resistance applied thereto.

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Patent family members are listed in annex.

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